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Re: Yucca Mountain site recommendation

I am convinced that a recommendation to develop Yucca Mountain as a nuclear repository for spent fuel and high level radioactive waste is not in the best interest of public health and welfare.

The scientific investigation of the area reveals that the underlying geologic structure lacks the long term stability to ensure a reasonable expectation that seismic active constituting a major incident will not occur during the anticipated life of the repository. Damage has even occurred to the ancillary installation during site characterization during the past decade. There is no reason to believe it to be an isolated incident when evaluated in respect to the results of the magnetic anomaly imaging presented at a Devil's Hole Workshop by the DOE.

The potential for seismic activity disrupting the monitoring process, and or damaging the tunnels or containers is a high probability when considering that this area is near, if not on, the Sevier Fault that separates the Sierra Range from the old Colorado Plateau. It is also less than 70 miles north of the juncture of the Sevier and the Garlock Faults. Historically, and even evidence of recent prehistory may not show a high level of seismic activity, but the evidence observed in nearby mines does not bear out the assumption that no future activity can be anticipated.

The discovery of ground water intercepts during initial tunneling negates any claim that the repository tunnels are some 300 meters above the groundwater. The potential exists that any release of contaminants can very well become a risk to the safety of the area resident's agricultural and drinking water. Considering that the population in Amargosa Valley can be anticipated to grow in a similar fashion as other southern Nevada communities, this is unacceptable. An additional risk exists in that dairy farming in this same area distributes their products in both Nevada and California and could result in catastrophic exposure to millions of consumers if radioactivity in the milk supply escaped detection.

The groundwater in the primary area for pollution (Amargosa valley in both Nevada and California and Death Valley) is known for the number of closely coupled underground water channels. Pumping at Jackass Flats airport and the effect on adjacent wells is documented by hydrologists. One particular area near the California border is known for the number of wells with relatively shallow under ground water pools. This is evident that the drill breaks free into a water filled cavern at levels of 60 to 75 feet below the surface in several places. Some have been reported as near as 10-12 feet from ground level.

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In respect to the ground water itself the area is rife with intrusion fissures that bring heated water (some believed to be 'virgin water' from the combustion of hydrogen and oxygen occurring in the molten core of the earth) into the lower aquifer and frequently via fissures into the near surface groundwater currently being tapped for domestic and agricultural purposes. These fissures appear to shunt the water from route to route leaving it logical to believe that the unused dormant fissures may also feed near surface groundwater down into the aquifer below it.

The transport of the radioactive spent fuel and waste poses a risk to a wide segment of the population by the proposed method of transport. Each movement of the waste incurs a potential incident from each and every other moving vehicle that occupies the adjacent or opposing lanes of traffic on the highways. This could entail hundreds of potential incident per mile traveled over some Interstate routes. Yes, rail transport would reduce this potential hazard by limiting the point of conflict with other vehicles, but extensive expansion of connector infrastructure would be necessitated for use during a limited timeframe. It seems obviously that any risk would be substantially reduced if not eliminated if the waste were not moved from it current location.

CONCLUSION:

I do not believe that Energy Secretary Abraham should make a favorable recommendation for this site primarily for the reasons given in the foregoing. I do not believe that the research is sufficient to confirm the conclusions related in the *Preliminary Site Suitability Evaluation*.

The risk to public health and safety should preclude any authorization by the President to implement a transport plan over existing means and routes of travel.

I am of the opinion that if the moneys spent to date and projected to implement the repository program were devoted to the development of alternate means of decontamination of the radioactivity many if not all risks would not be encountered. European technology in this field may not be acceptable but appears to be a leg up on our current proposed disposition of this waste.

This program may not have a detrimental effect on my self during my lifetime, it may even escape all major incidents during transport, and even if it proves to be absolutely safe, it is only a stopgap measure and not a solution to the problem. Nuclear power systems by necessity will necessarily proliferate. Spent fuel and waste material will continue to be a problem.

The only long term and viable solution is one of technology that will render the material harmless.



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cc: Sen. Reid, Sen. Ensign, Gov. Guinn

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